

*Application Serial No. 10/019,767
Amendment and Response dated June 23, 2005
Reply to Office Action mailed March 23, 2005*

REMARKS/ARGUMENTS

Claims 13-22 are pending. As set forth more fully below, reconsideration and withdrawal of the Examiner's rejections of the claims are respectfully requested.

Claim Rejections Under 35 U.S.C. § 103

The Examiner has rejected claims 13-22 under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,620,057 ("Pirritano") in view of U.S. Patent No. 6,021,949 ("Boiron").

The device of the present invention has a coded chip (12) and a generally circular copper coil aerial (14). In addition, the device includes a shock absorbing member diaphragm (16) that is resiliently mounted (see, for example, page 3, paragraphs 5 and 6 of the instant specification).

Independent Claim 13 recites a golf ball including a core with an identification device located in a capsule embedded in the core. The identification device includes an aerial, a resiliently mounted diaphragm, and a coded element mounted on the resiliently mounted diaphragm. The capsule surrounds the diaphragm with room for relative movement there between.

Pirritano describes a golf ball comprising a core (31) housing three passive transponders (33). The transponders are in the form of flat loop inductors. The loop is a circular copper antenna. The shape and dimensions of the transponders are chosen so that the transponder is a 0.39 wavelength antenna at 2.45 Ghz. It is important that the antenna is impinged upon by the 2.45 Ghz field (for example column 15 lines 26 to 28, column 5 lines 41 to 44, column 6 lines 7 to 9, 30 to 32, 40 to 50 and 53 to 66). Thus the whole focus of the application is that the shape

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and dimensions of the loop inductors (antennae) resonate at 2.45 Ghz so that the location system is operative. It is preferred that the transponders are on the surface of the core. They may however be within the core or on the inner or outer surface of the ball jacket .

Pirritano does not describe an identification device located in a capsule embedded in the core as required by the instant claims. Furthermore, Pirritano does not describe a resiliently mounted diaphragm with a coded element mounted on the diaphragm. Additionally, loop inductors (33) are antennae; they are not resiliently mounted diaphragms.

Pirritano seeks to overcome problems of prior art remote sensing methods for locating golf balls. These problems include short effective range (column 2 lines 59 to 61), lack of penetration in foliage (column 3 lines 3 to 7), altered flight characteristics and large size (column 3 lines 24 to 34). There is no mention or suggestion of attempting to produce an identification device which is robust enough to withstand the shock of repeated impacts with a golf club, and to withstand the extreme conditions of temperature and pressure required during the manufacture of golf balls (see page 1, paragraphs 5 and 6 of the instant specification). Thus, the skilled person would not be motivated by the disclosure of Pirritano to provide the solution recited in claim 1 as the problem is not even identified or considered by Pirritano.

Boiron relates to a gaming token comprising an identification device so that the token can be identified to reduce fraud. Thus, Boiron relates to an entirely different technical field. It does not relate to a remote sensing method for locating any article, let alone a golf ball. Similar to Pirritano, Boiron does not disclose all the features of the instant Claim 1. Figures 5a-c show part

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of the token at stages in the manufacturing process. Fig. 5a shows the electronic circuit (52) of the identification device connected to a peripheral circular antenna (54). This is not a resiliently mounted diaphragm as required by Claim 1.

A half shell (56) and the electronic identification device (49) are placed in the mold (58) of an injection press (Fig. 5b) in order to form a rigid monobloc assembly forming shell (44) (Fig. 5c and column 5, line 66 to column 6, line 14). It is clear that a rigid shell substantially encapsulates the identification device (claim 1). The rigid shell not only provides physical protection of the identification device but also ensures its invisibility in the shell which guarantees the authenticity of the token reducing fraud. The rigid body may be obtained in a number of ways (column 2 line 22 to 49). However, none of the embodiments include an identification device comprising a resiliently mounted diaphragm and a coded element mounted on the diaphragm as required by Claim 1. Additionally, Boiron does not disclose a resiliently mounted diaphragm, and therefore there is no capsule surrounding the diaphragm with room for relative movement there between.

The applicants disagree that the skilled person having knowledge of Pirritano would combine this document with Boiron. Boiron is in a completely different technical field and there is no suggestion in Pirritano of the problem of shock prevention. Furthermore, the skilled person would not be motivated to modify the transponder in Pirritano since the precise shape and dimensions are essential for the remote sensing system to work. In addition, the preferred location of the transponder in Pirritano is on the surface of the core. However, even if the skilled

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person were to combine the disclosures of Pirritano and Boiron, then the combination would fall short of the invention as claimed because neither Pirritano nor Boiron disclose a coded element mounted on resiliently mounted diaphragm, the diaphragm surrounded by the capsule with room for relative movement there between. Therefore, Applicants submit that the combination of references cited by the Examiner does not teach every limitation of Claims 13-22 and there is no motivation to combine the Pirritano and Boiron references.

Regarding Claim 14, neither of the cited documents describe nor suggest a plate as required by Claim 14 whereby the diaphragm and the aerial are mounted on opposite surfaces. Regarding Claim 15, neither document describes a diaphragm. In Pirritano, the coded element is mounted on the circular aerial. Regarding claim 16, neither document describes a plate and so the arrangement of claim 16 is not described or contemplated either. Regarding claims 17, 18 and 19, neither document describes a diaphragm and so the further features of the diaphragm are not disclosed either.

Claim 21 relates to a method of manufacturing a golf ball whilst Pirritano refers to the manufacture of the flat loop inductors (antennae) (see column 15, lines 24 to 44). Pirritano does not disclose a method of manufacturing a golf ball. Claim 21 refers to molding a capsule identification device in a capsule member with room for relative movement between the identification device and material of the capsule member. Pirritano does not describe this; the identification device is not in a capsule and there is no impact protection means. Applicants are unaware of the location of the Examiner's reference to "other manufacturing variations are also

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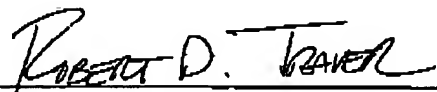
possible as will occur to those skilled in the art.” However, since these features are not contemplated in Pirritano, then it would not be obvious to the skilled person to include them. As noted above, the applicants believe that the skilled person having knowledge of Pirritano would not consider Boiron. Boiron is in a different technical field. The Examiner remarks that Pirritano at Column 17 notes the locator system could be used to locate other objects. Applicants do not dispute this. However the system in Pirritano involves a hand held transmitter/receiver which is swept from side to side until the user detects a reading indicating the location of the object (column 16 paragraph 2). This is quite different to what is contemplated in Boiron. Boiron uses identification devices in gambling tokens so that the authenticity of a chip can be checked to combat fraud. The skilled person would further be dissuaded from applying any disclosure relating to the manufacture of tokens to the manufacture of golf balls. Simply using an identification device known in one field in a golf ball could alter the flight characteristics of the ball and Pirritano has identified this as a particular problem (column 3 lines 31 to 34). Even if the skilled person were to combine the disclosures, the disclosure falls short of the method as claimed. Neither disclosure describes or contemplates the first step of method claim 21 (i.e. “molding a capsule identification device in a capsule member with room for relative movement between the identification device and material of the capsule member, wherein means for protecting the identification device from the effects of impacts are molded in the capsule member.”) Therefore, Applicants submit that the combination of Pirritano and Boiron do not teach or suggest all of the limitations of method claims 21 and 22.

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Based upon the foregoing, Applicants believe that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

SHERIDAN ROSS P.C.

By: 

Robert D. Traver
Registration No. 47,999
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141
(303) 863-9700

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